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ABSTRACT

Although understanding how causal attributions for performance develop is important to attribution theory, little research has been done on this topic. To explore changes in attributions during task performance for both actors and observers, 90 female undergraduates participated in a procedure in which they received either 80 percent or 20 percent success feedback. After either 5, 20, or 40 trials they computed attribution measures. Subjects were randomly assigned to the role of actor or observer. The task involved raising a ball bearing balanced on a carriage to the top of a platform using a cord and pulley. Unknown to subjects, an electromagnet was used to affect outcome. Results showed that regardless of reinforcement level, at 20 trials observers were more internal than actors; but at 40 trials, actors were more internal than observers, indicating that attributional differences developed over time and developed differently for actors and observers. Actors' focus may shift from the situation toward themselves, and observers' focus may shift from the actor toward the situation. (JAC)

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Temporal Effects of Performance on Causal Attributions in Actors and Observers

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Abstract

Subjects worked or watched others work at a game in which they receive either 80% or 20% success feedback. After either 5, 20, or 40 trials, subjects completed attribution measures. Regardless of reinforcement level, at 20 trials observers were more internal than actors, but at 40 trials actors were more internal than were observers. These results are discussed in terms of focus of attention, which may shift from the situation to the self among actors and from the actor to the situation among observers.

Temporal Effects of Performance on

Causal Attributions in Actors and Observers

Overview

This morning I'd like to present some research that explores how causal attributions for performance develop over time. Understanding how attributions develop is obviously important for attribution theory. But there has been very little direct research on this topic. The research I will discuss today focuses on changes in attributions that occur during task performance among both actors (people who are actively involved at a task) and observers (people who merely watch actors work at the task).

First I'd like to explain the context and theoretical background of this research. Then I'll describe a study that explores how actors' and observers' attributions develop over the course of performance. Finally, I'll present the study's results and discuss some of their implications for attribution theory. So, let me turn first to the theoretical context of this research and give you a little bit of the background.

Theoretical Background

There has been a great deal of theory and research exploring differences between actors' and observers' attributions following task performance (Monson &

Snyder, 1977; Watson, 1982). Much of this research has supported Jones and Nisbett's (1971) so-called "actor-observer" hypothesis--that is, because of differences in availability or processing of information, actors attribute outcomes to the situation, while observers attribute the same outcomes to actors' dispositions. This work suggests that observers make greater internal attributions for performance than do actors.

Another body of research, on the other hand, has supported the opposite conclusion. This work has found that actors make greater internal attributions for performance than do observers. But none of these studies has explored how actors' and observers' attributions develop over time.

Clearly, attributions for performance may change as one gains more and more experience at a task. Moreover, actors' attributions may change differently over the course of performance than observers' attributions. For example, think about a novel task at which people receive some constant level of success throughout their performance. Actors who succeed on the first few trials at this task may feel that they are just lucky (a case of "beginner's luck"); but with more and more successes, actors may come to believe that their performance is due to their ability at the task. Observers, on the other hand, may see actors'

early successes as due to ability; but as actors experience a greater number of successes, observers may come to believe that the task is merely easy, and may use this to explain the actors' performance (see Jones et al., 1968). This temporal perspective suggests that whether actors or observers make greater internal attributions may depend on the amount of performance (or the number of trials) that they have experienced at the task.

It seems unclear from Jones and Nisbett's (1971) work whether actors' and observers' attributions should differ from the beginning of performance, or whether actor-observer differences should develop gradually over time. If differences in the availability of information account for actor-observer differences, then you might expect actors' and observers' attributions to differ from the outset of performance. This is because crucial information about actors' internal states and past experiences is missing for observers from the very beginning of performance. If, however, differences in the processing of information account for attributional differences, then you might expect actors' and observers' attributions to be similar in the beginning of performance, but to diverge gradually as more and more information unfolds over time. The present study was designed to test these

ideas by comparing actors' and observers' attributions at early, intermediate, and late points in performance.

Method

Having given you a little background to this work, let me now describe the specific method and procedures of the study. The general procedure involved subjects either working at a novel task in which they received either 80% or 20% success feedback. Initial pilot testing indicated that subjects who were not interrupted at the task would work for about 50 trials before quitting. Based on this information, I decided to stop subjects after either 5, 20, or 40 trials, to have them complete dependent measures at early, intermediate, or late points in performance. I decided to use number of trials as a between-groups variable because pilot work showed that a within-subjects design produced reactive effects. In other words, completing dependent measures more than once anchored subjects' ratings and lowered their responses to later measures.

Subjects were 90 female undergraduates who were randomly assigned to the role of actor or observer and to the reinforcement-level and number of trials conditions. I arranged the laboratory and procedures so that two actor-observer pairs could be run in each session (one pair to receive 80% reinforcement and the other pair to receive 20% reinforcement).

The experimental task was a modified version of a frustration task used in previous research (Miller & Seligman, 1973; Sky, 1950). It required the actor to raise a 1/4-inch ball-bearing balanced on a carriage to the top of a platform, using a cord and pulley. A container was mounted at the top of the platform to collect ball bearings that reached the top. A success was defined as raising a ball-bearing into the container at the top of the platform. A failure occurred anytime a ball fell from the carriage before reaching the top of the platform.

Unknown to subjects, the center of the carriage contained an electromagnet that was used to hold the ball on the carriage or to knock the ball off on each trial by pressing a switch from behind a partially covered one-way mirror. This way I could standardize performance and could control it according to a predetermined 80% or 20% reinforcement schedule.

Observers watched and listened to actors from behind a hidden one-way mirror, so that actors were unaware of observers, and both actors and observers were unaware that performance was being manipulated.

Subjects were told that the study concerned the use of games and tasks for educational, recreational, and therapeutic purposes. Actors were told that they would be playing a game called "the Balancing Ball" and

that later they would be asked some questions about their reactions to it. They then heard a 5-minute tape-recording of instructions before working alone at the task. After the appropriate number of trials of success or failure feedback, actors were signalled to stop. Both the actor and the observer then completed a questionnaire containing the dependent measures. I used to separate experimenters to control performance feedback and to administer dependent measures, in order to preserve experimenter blindness.

All dependent measures were completed in private and were kept totally anonymous, in order to minimize the effects of evaluation apprehension, social desirability, and self-presentation. Initial items checked on effectiveness of the manipulations. Separate attribution measures asked subjects to rate the degree to which ability, effort, task difficulty, and luck determined performance at the task. These attribution items were later combined into composite indexes of internal and external attributions according to previous research.

Results

Now that I've described the basic procedure, let me turn to the results of the study. Both actors and observers perceived the reinforcement-level and number of trials manipulations accurately. Three-way analysis

of variance showed no significant effects for external attributions. But, for internal attributions, I found a significant number of trials x actor-observer interaction.

If you'll turn to Table 1, you'll see the means contributing to this interaction. At 5 trials, actors and observers did not differ in their internal attributions. But, from 5 trials to 20 trials, observers' internal attributions increased, while actors' internal attributions remained constant. So, at 20 trials, observers made greater internal attributions than did actors. But then from 20 trials to 40 trials, actors' internal attributions increased, whereas observers' internal attributions decreased. So, at 40 trials, actors made greater internal attributions than did observers. These effects held regardless of reinforcement level.

To summarize, at 20 trials, observers were more internal than actors; but at 40 trials, actors were more internal than observers. So we see that attributional differences did not appear at the outset of performance, but rather they developed over time and they developed differently for actors and observers.

Discussion

Clearly, the amount of performance that one experiences can modify one's causal attributions. In

the present study, the number of trials of performance determined whether actors or observers made greater internal attributions. After a moderate number of trials (20 trials) at the task, observers attributed performance more internally than did actors themselves. This actor-observer difference is consistent with Jones and Nisbett's (1971) attributional hypothesis. After twice as many trials (40 trials), however, exactly the opposite effect occurred, so that actors attributed performance more internally than did observers. Again, these temporal effects held regardless of whether actors succeeded or failed at the task. The fact that past attribution research has generally ignored the number of trials variable may explain much of the inconsistency in the actor-observer literature.

There are at least two possible explanations for these temporal effects. First, people who are actively involved at a task may take longer before making internal attributions than those who are passively watching because internal attributions have greater implications, for expectancy, self-esteem, and mood, when one is personally involved.

Alternatively, and more in line with Jones and Nisbett's (1971) reasoning, subjects' focus of attention may gradually change over time. Actors' focus may shift from the situation toward themselves,

and observer's focus may shift from the actor toward the situation. This second explanation is consistent with recent work by Bert Moore and his colleagues (Moore et al., 1979) which has found that, as time goes by, people explain their past behavior in more dispositional ways.

I am about to start a follow-up study designed to test this second "focus of attention" explanation. This study will see whether manipulating "objective self-awareness" (Duval & Wicklund, 1972) changes actors' attributions toward greater internality earlier in performance.

I'm also interested in studying what happens to actors' and observers' attributions with even greater numbers of trials (e.g., 50, 75, 100). With more trials does the shift toward internality among actors become even stronger or does it reverse toward less internality (Miller & Porter, 1980)? Do observers' attributions remain less internal or do they again become more internal later on? By resolving these issues, I hope to enhance our understanding of how causal attributions develop over time and to clarify the mechanisms by which such temporal effects operate.

References

Duval, S., & Wicklund, R. A. (1972). A theory of objective self-awareness. New York: Academic Press.

Jones, E. E., & Nisbett, R. E. (1971). The actor and observer: Divergent perceptions of the causes of behavior. Morristown, NJ: General Learning Press.

Jones, E. E., Rock, L., Shaver, K. G., Goethals, G. R., & Ward, L. M. (1968). Pattern of performance and ability attribution: An unexpected primacy effect. Journal of Personality and Social Psychology, 10, 317-340.

Miller, D. T., & Porter, C. A. (1980). Effects of temporal perspective on the attribution process. Journal of Personality and Social Psychology, 39, 532-541.

Miller, W. R., & Seligman, M. E. P. (1973). Depression and learned helplessness in man. Journal of Abnormal Psychology, 84, 228-238.

Monson, T. C., & Snyder, M. (1977). Actors, observers, and the attribution process: Toward a reconceptualization. Journal of Experimental Social Psychology, 13, 89-111.

Moore, B. S., Sherrod, D. R., Liu, T. J., & Underwood, B. (1979). The dispositional shift in attribution over time. Journal of Experimental Social Psychology, 15, 553-569.

Sky, A. W. (1950). An apparatus for a frustration task. Australian Journal of Psychology, 2, 116-120.

Watson, D. (1982). The actor and the observer: How are their perceptions of causality divergent? Psychological Bulletin, 92, 682-700.

Table 1

Mean Internal Attributions for Actors and Observers Over Time

	Number of Trials		
	5	20	40
Actors	15.74[a] (n=16)	17.38[a] (n=15)	19.99[b] (n=15)
Observers	19.90[a] (n=14)	23.61[b] (n=15)	15.46[a] (n=15)

Note: The higher the mean, the greater the attribution. Group means in the same row or column that do not share a common superscript are significantly different at beyond the .05 level.